

EXPERIMENTAL PROJECT

**EVALUATION OF TECHNIQUES IN THE REHABILITATING OF CORRUGATED
STEEL PIPE (CSP) IN THE EFFORT TO RESTORE FUNCTION AND STRUCTURAL
INTEGRITY**

WORK PLAN

Location: MacDonal Pass – Lewis & Clark County
Highway 12, N-8 (C000008)

Project Name: MacDonal Pass Culvert Rehabilitation

Project Number: NH-HFL 8-1(30)23

Type of Project: CSP Culvert Rehabilitation experimental trial using two
types of culvert lining applications.

Principal Investigator(s): Craig Abernathy, Experimental Program Manager

Objective

Line the existing deteriorated culverts using one of two innovative construction methods for the State of Montana. The existing 10 (24", 600mm approximate) corrugated steel pipe CSP culverts will incorporate two applications involving the installation of a (HDPE) plastic lining and cured polymer compound lining to restore function and structural integrity to the CSP.

Goals:

1. Record all aspects of installation.
2. Evaluate performance of all CSP treatments.
3. Document overall effectiveness of applications.
4. Technology transfer.

Experimental Design

Of the ten culverts to be addressed, five (5) CSP culverts will be modified with the plastic lining and five (5) with the cured polymer compound.

Evaluation Procedures

Installation of all modified culverts will be document by Research staff. Semi-annual evaluations will collect information on potential deflection, integrity of the linings and interior walls, leakage, flow, discoloration, and other visual distress these products may develop. The evaluation may also document adjacent CSP pipe of the same diameters to compare performance.

Project Layout

Pending.

Quantities and Cost:

Pending.

Evaluation Schedule

Research will monitor performance for a period of five years semi-annually, with every year up to *ten years (informally). This is in accordance with the Department's "Experimental Project Procedures". Delivery of a construction/installation report, interim, annual or semi-annual reports is required as well as a final project report (responsibility of Research).

2008:	Installation	Research Installation/Construction Report
2008:	Interim	90 Day Post Field Status Report
2009-2013:	Semi-Annual Evaluation	Annual Reports (Fall/Spring incorporated)
2014:	Final Evaluation	Final Evaluation Report
2015-2020:	Annual Evaluation	Annual Reports (Informal)